

SUPPORT FOR THE AMENDMENTS

Claim 19 has been amended to identify the sequence listed therein with a specific sequence identification number, to recite species of a polyanion equivalent to heparin or heparan sulphate, and to place the claim in a better condition for allowance. Support for the amendment to claim 19 is found at specification page 7, lines 8-16.

The specification has been amended to recite a claim of priority to related International and French patent applications, as set forth in the originally filed Application Data Sheet. The specification has also been amended to identify a sequence listed therein with a specific sequence identification number.

The specification has further been amended to replace the previously filed Sequence Listing with the attached Substitute Sequence Listing. In response to the Official Action dated January 10, 2008, Applicants append herewith a printed (pdf.file) copy of a written Substitute Sequence Listing along with a corresponding electronic (txt.file) copy of the Substitute Sequence Listing recorded in computer readable form. Applicants submit that the content of the electronic copy of the Substitute Sequence Listing is identical to the printed copy of the written Substitute Sequence Listing. Applicants further submit that the sequence shown in the electronically filed Substitute Sequence Listing is identical to the sequence contained in this application as originally filed. Support for the sequence listed in the printed, and corresponding electronic, Substitute Sequence Listing is found within the present application as originally filed. In view of the foregoing, Applicants respectfully submit that the present application is now in compliance with 37 C.F.R. §§ 1.821-1.825.

It is believed that no new matter has been introduced by the amendments to the claims, specification and the submission of the attached Substitute Sequence Listing.

REMARKS

Claims 19-25 are currently pending in the present application. Claim 19 has been amended by the present amendment.

The rejection of claims 19, 20 and 22-25 under 35 U.S.C. § 112, first paragraph (written description), is respectfully traversed in part, and obviated by amendment in part, with respect to the amendment to claim 19.

The originally filed specification is alleged as failing to provide adequate written description for any structural (i.e., specific sequence, chemical name or formula) or functional information with respect to a polyanion equivalent to heparin or heparan sulfate, and a CD4 peptide sequence of formula (I).

All that is required to satisfy the written description requirement, is that the specification describe the claimed invention in sufficient detail such that a skilled artisan could reasonably conclude that the inventors had possession of the claimed invention at the time of filing. See 35 U.S.C. § 112, first paragraph, and MPEP §§ 706.03(c) and 2163.

Claim 19 has been amended to recite, in part, a composition comprising: a polyanion selected from the group consisting of heparin, heparan sulphate, and a polyanion equivalent to heparin or heparan sulphate selected from the group consisting of dextran sulfate, curdlan sulfate, 2-naphthalene sulfonate polymer, pentosan polysulfate and resobene, said polyanion having a degree of polymerization dp of 10 to 24,” to thereby more narrowly define the species that constitute a polyanion equivalent to heparin or heparan sulphate (See e.g., page 7, lines 8-16). The originally filed specification also provides that the polyanion interacts with the V3 loop and the exposed CD4-induced (CD4i) epitope of the gp120 viral protein (See e.g., page 6, lines 7-14, page 10, lines 11-19, page 24, lines 5-8, page 27, lines 27-35, page 28, lines 1-5, and Fig. 7). Applicants respectfully submit that the originally filed specification provides sufficient written description for a polyanion equivalent to heparin or heparan sulphate, as recited in amended claim 19.

With respect to the CD4 peptide sequence of formula (I), the originally filed specification sufficiently describes a representative number of peptide species thereof (See e.g., page 9, lines 26-30, page 13, lines 27-34, SEQ ID NO: 3-18). In addition, the originally filed specification provides that the CD4 peptide sequence of formula (I) induces exposure of, to thereby allow the polyanion to interact with, the CD4i epitope of the gp120 viral protein (See e.g., page 8, lines 27-30, page 13, lines 27-34, page 27, lines 25-29, and Fig. 7). Furthermore, the originally filed specification provides that the CD4 peptide sequence of formula (I) includes a β -hairpin conformation having amino acid residues (Ala or Gln) – (Gly or (D)Asp or Ser) – (Ser or His or Asn) – Xaa^J and that these peptides show an extremely high binding affinity for the gp120 viral protein (See e.g., page 9, lines 5-24). The CD4 peptide sequence of formula (I) exhibits a well-defined three-dimensional structure and an extremely high binding affinity for the gp120 viral protein due to the presence of the amino acid residues of the β -hairpin conformation and the cysteine residues at the positions identified therein, whereas the amino acids of P¹, P², and P³, for example, primarily serve as spacer residues for imparting distance. Applicants respectfully submit that the originally filed specification provides sufficient written description for the claimed CD4 peptide sequence of formula (I).

Withdrawal of these grounds of rejection is respectfully requested.

The rejection of claims 19-20 and 22-25 under 35 U.S.C. § 103(a) as being obvious over Harrop (AIDS) in view of Vita (U.S. 2006/0121538) is obviated by perfecting a claim to foreign priority thereby antedating any English language equivalent of Vita as a prior art reference.

The present application is a 35 U.S.C. § 371 National Stage patent application of International patent application PCT/FR03/01234, filed on April 17, 2003, which claims priority to French patent application FR 02/04926, filed on April 19, 2002.

Applicants respectfully submit that Vita (U.S. 2006/0121538) does not qualify as prior art under 35 U.S.C. §§ 102 or 103. Vita has a publication date of June 8, 2006, and therefore does not

qualify as prior art under 35 U.S.C. § 102(a) or (b). Furthermore, neither Vita, nor priority document WO 02/059146, qualify as prior art under 35 U.S.C. § 102(e), since WO 02/059146 was published in a non-English language (See e.g., MPEP § 706.02(f)(1), Example 5 and III. Flowcharts).

However, it should be mentioned that although Vita does not qualify as prior art under 35 U.S.C. §§ 102 or 103, Vita could have been relied upon as the English language equivalent of AU 02/233424 (published August 6, 2002), WO 02/059146 (published August 1, 2002), CA 2435097 (published August 1, 2002) and FR 2819809 (published July 26, 2002). Accordingly, Applicants have enclosed herewith a certified English translation of foreign priority document FR 02/04926, thereby antedating any English language equivalent of Vita as a prior art reference. Withdrawal of this ground of rejection is respectfully requested.

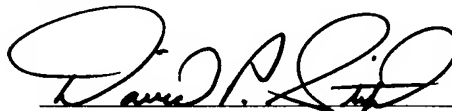
The rejection of claims 19, 20 and 22-25 under 35 U.S.C. § 112, second paragraph, is obviated by amendment. Withdrawal of this ground of rejection is respectfully requested.

The objection to the specification is obviated by amendment. Applicants respectfully submit that the present application is now in compliance with 37 C.F.R. §§ 1.821-1.825. Withdrawal of this ground of objection is respectfully requested.

In conclusion, Applicants submit that the present application is now in condition for allowance and notification to this effect is earnestly solicited.

Respectfully submitted,

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